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# A NEW SPECIES OF THE SUBGENUS *SINODACUS* FROM YUNNAN, CHINA (DIPTERA, TEPHRITIDAE)

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**Abstract** We studied the specimens of the genus *Bactrocera* collected from Yunnan and recognized one new species: *Bactrocera* (*Sinodacus*) *disturgida* sp. nov. A key to related species of subgenus *Sinodacus* is presented. The type specimens are deposited in the Chinese Academy of Inspection and Quarantine (CAIQ), Beijing.

**Key words** Tephritidae, *Bactrocera*, *Sinodacus*, new species, China.

The subgenus *Sinodacus* Zia is a small subgenus of the genus *Bactrocera* Macquart. *Sinodacus* can be recognized by the following characters: chaetotaxy of head and thorax reduced, lacking ocellar, postocellar, dorsocentral, katepisternal and postpronotal setae; anterior supra-alar setae present; prescutellar acrostichal setae absent; 1 pair of scutellar setae. Abdominal tergites not fused; pecten of cilia present on tergite 3 of male; sternite 5 of male slightly concave on posterior margin; posterior lobe of surstylus long (Drew, 1989; Wang, 1996).

The general terminology follows White *et al.* (1999). Genitalic preparations were made by macerating the apical portion of the abdomen in cold saturated NaOH for 12 - 14 h. After maceration, genitalia were examined in fresh glycerine and stored in a pinned below the specimen.

**Key to related species of subgenus *Sinodacus*.**

1. Face with one black spot on each side ..... 2
   Face with black band or entirely black ..... 5
2. Scutum without lateral vittae ..... ***B.* (*S.*) *chonglui* Chao *et* Lin**
   Scutum with lateral vittae ..... 3
3. Scutum with yellow band, lateral vittae short and ending at base of *a spal s* ..... ***B.* (*S.*) *transversa* (Hardy)**
   Scutum without yellow band, lateral vittae long and ending at base of *i vt s* ..... 4
4. Basal 2/3 of hind tibiae red-brown ..... ***B.* (*S.*) *drewi* (Hardy)**
   Basal and apical of hind tibiae brown ..... ***B.* (*S.*) *vinnula* (Hardy)**
5. Scutum with a median vitta ..... 6
   Scutum without a median vitta ..... 9
6. Scutum without lateral vittae ..... ***B.* (*S.*) *infesta* (Enderlein)**
   Scutum with lateral vittae ..... 7
7. Lateral vittae short ending before *a spal s* ..... ***B.* (*S.*) *qionganus* Chao *et* Lin**
   Lateral vittae long ending beyond *a spal s* ..... 8
8. Scutellum with 2 *sctl s* ..... ***B.* (*S.*) *laterum* (Wang)**
   Scutellum with 4 *sctl s* ..... ***B.* (*S.*) *quaterum* (Wang)**
9. Face entry black ..... ***B.* (*S.*) *eurylomata* (Hardy)**
   Face with black band ..... 10
10. Scutum without postsutural yellow vittae ..... ***B.* (*S.*) *hochii* (Zia)**
    Scutum with postsutural yellow vittae ..... 11
11. Face with 2 dark bands; scutum without dark spot, lateral vittae ending at base of *i vt s*, scutellum with 2 *sctl s* ..... ***B.* (*S.*) *disturgida* sp. nov.**
    Face with 1 black band; scutum with a triangular dark spot, lateral vittae ending before transverse suture, scutellum with 4 *sctl s* ..... ***B.* (*S.*) *jiannanus* Chao *et* Lin**

***Bactrocera* (*Sinodacus*) *disturgida* sp. nov.** (Figs 1 - 6)

Male. Body length 5.0 - 6.1 mm, wing length 4.5 - 5.1 mm.

Head fulvous. Frons fulvous, anteromedially with fuscous hump and a few short setulae on hump; ocellar triangle black; a dark brown mark extending across vertex and connecting with ocellar triangle; lunule fulvous; face (Fig. 2) fulvous with two bands; one being brown; the other being black; gena fulvous; a dark brown spot below each eye; occiput fulvous to fuscous, but yellow along eye margins. Setulae and setae on head black; 2 frontal setae, 1 orbital seta, with dark brown spots at base of frontal seta and orbital seta; 1 inner vertical seta, 1 outer vertical seta and 1 genal seta. Occipital row with some black setae. Antenna fuscous except segment 3 dark fuscous on apex and outer surface; arista bare, black but yellow basally. Proboscis and palpus fulvous.

Thorax shining black on scutum in ground color, postpronotal lobes entirely yellow. Pleura predominantly black with following yellow markings: notopleuron, medium anepisternal stripe, small spot on katepisternum, upper portion of anatergite and katatergite, lateral vittae. Two mid lateral vittae parallel, ending at base of intra alar seta and connecting with yellow mark on each side before suture. Postnotum shining black. Scutellum yellow with a narrow black band at base. Setulae and setae on thorax black; usually postpronotal seta and prescutellar

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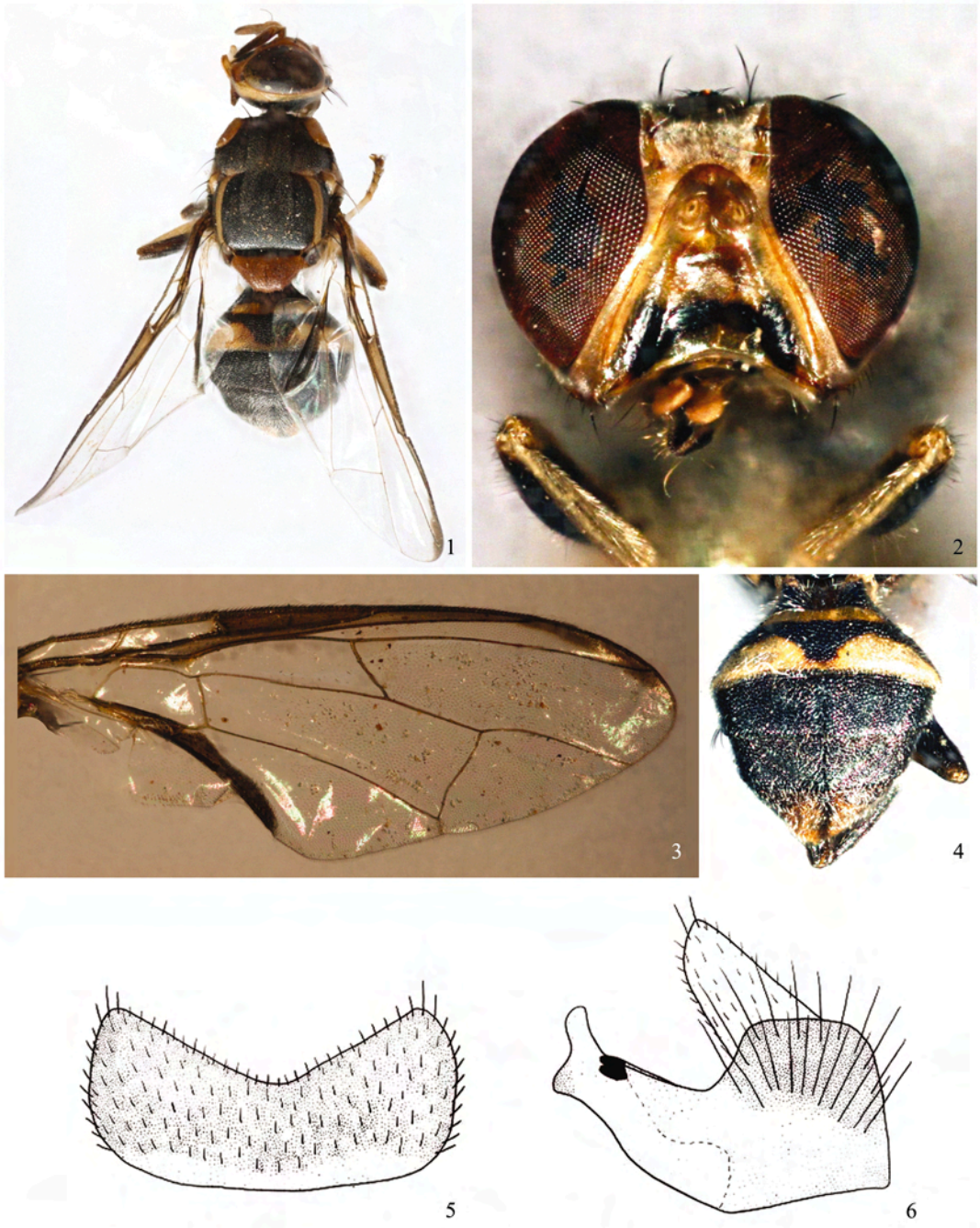

Figs 1 – 6. *Bactrocera* (*Sinodacus*) *disturgida* sp. nov., ♂. 1. Adult in dorsal view. 2. Facial bands. 3. Wing. 4. Abdomen of adult in dorsal view. 5. Sternite 5. 6. Epandrium, cercus and surstylus in profile.

acrostichal seta absent, but some specimens only with 1 prescutellar acrostichal seta; 1 anterior supraalar seta, 1 posterior supraalar seta, 1 intra alar seta, 2 scutellar setae; 2 notopleural setae and 4 scapula setae. Legs mainly fulvous; coxae, trochanters, outer surface of fore femora, apical 3/4 of mid femora and apical 2/5 of hind femora dark brown to black; outer surface of fore tibia and bases of mid and hind tibiae dark brown. Mid tibia with apical spur. Wing (Fig. 3) largely hyaline; costal band dark brown, confluent with $R_{2+3}$, narrowed at the end of $R_{2+3}$; anal streak broad and extending to posterior margin; cells bc and c colourless; microtrichiae located only at outer corner of cell c, dense setulae covering $A_1$ + $CuA_2$. Supernumerary lobe developed. Halter yellowish.

Abdomen (Fig. 4) oval, black; tergites free. Tergite 1 and sternites 1 – 2 wider than long. Tergite 1 with a brown posterior band; tergite 2 with two lunar fulvous posterior bands; pecten of cilia present on posterior margin of tergite 3; some specimens with two yellow small spots on posterior portion of tergite 4; apex of tergite 5 fulvous. A pair of oval fulvous shining spots on tergite 5. Sternites black except sternite 2 yellow to red-brown. Sternite 5 (Fig. 5)

slightly concave on posterior margin. Posterior lobe of surstylus short (Fig. 6).

Female. Unknown.

Etymology. The specific name refers to the costal band not expanding at the end of the wing.

Holotype ♂, Yunnan, Jinghong (22.01° N, 100.48°E), May 2009, DENG Yu-Liang. Paratypes: 4 ♂♂, same data as holotype; 2 ♂♂, Yunnan, Mengla (21.4° N, 101.5° E), June 2009, BAI Yong-Hua.

Distribution. China (Yunnan).

Remarks. The new species is somewhat similar to *B.* (*S.*) *vinnula* (Hardy) from Thailand in the following characters: scutum shining black in ground color, with two postsutural yellow vittae; scutellum with 2 scutellar seta, legs mainly fulvous, femora dark brown or black apically. *B. disturgida* can be separated from *B. vinnula* by the following characters: face with two bands; wing with a costal band confluent with $R_{2+3}$ and not expanded into a large spot at apex. But in *B.* (*S.*) *vinnula*, the face has two large black spots; the wing has a broad costal band overlapping $R_{2+3}$, and expanded into a large spot at apex (Hardy, 1973).

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# 中国云南华实蝇亚属一新种记述（双翅目，实蝇科）


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**摘 要** 记述了华实蝇亚属云南1新种。新种模式标本保存于中国检验检疫科学研究院动植物检疫所，北京。

**端小果实蝇，新种 *Bacterodacus* (*Sinodacus*) *disturgida* sp. nov.**（图1～6）

新种与 *B.* (*S.*) *vinnula* (Hardy) 相似，但颜具2横带，翅前缘带较窄，端部不扩大。

正模 ♂，云南西双版纳景洪，2009-05，邓裕亮采。副模：4♂♂，同正模；2♂♂，云南勐腊，2009-06，白永华采。

词源：新种种名源自其特征前缘带在端部不扩大而定名。



**关键词** 实蝇科，果实蝇属，华实蝇亚属，新种，中国.

**中图分类号** Q969.456.8



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